

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
1 September 2005 (01.09.2005)

PCT

(10) International Publication Number  
**WO 2005/080060 A1**

(51) International Patent Classification<sup>7</sup>: **B29B 17/00**,  
13/02, B09B 3/00, B29C 39/00

(21) International Application Number:  
PCT/GB2005/000493

(22) International Filing Date: 11 February 2005 (11.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0403269.4 13 February 2004 (13.02.2004) GB

(71) Applicant and

(72) Inventor (for all designated States except US):  
**SCHEERES, David, J.** [GB/GB]; Paskeston Hall,  
Cosheston, Pembrokeshire SA72 4SF (GB).

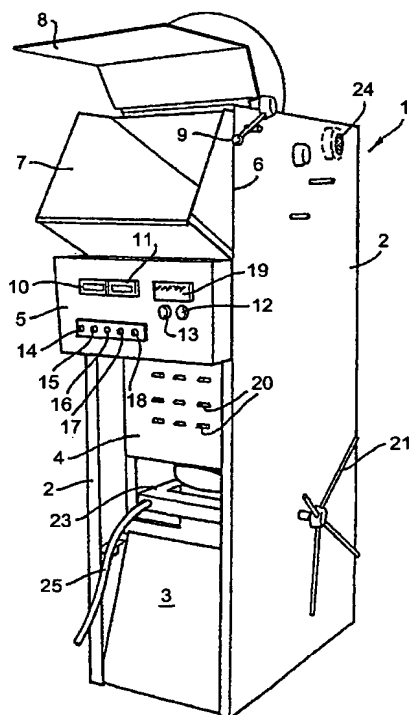
(74) Agents: **KELTIE, David, Arthur** et al.; David Keltie As-  
sociates, Fleet Place House, 2 Fleet Place, London EC4M  
7ET (GB).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: TREATMENT OF PLASTIC WASTE



(57) Abstract: From one aspect, there is provided a method of treat-  
ing a volume of plastics waste, the method including providing a vol-  
ume of plastics waste comprising one of more plastics types, the or  
each plastics types having a melting point and a flash point and pro-  
viding a heating zone having an entry zone through which the volume  
of plastics waste is feedable. The heating zone is brought to an op-  
erating temperature so as to avoid carbonisation of the plastics waste  
and the plastics waste is heated so that at least some of the plastics  
is melted to form a flowable plastics melt. The flowable plastics melt  
is caused to flow through the outlet under the influence of gravity into  
a cooling zone during which gas is allowed to escape to facilitate the  
flow. From another aspect there is provided an apparatus for treating a  
volume of plastics waste including a melt chamber defining a heating  
zone and heating means for heating the volume of plastics waste. The  
heating means includes a plurality of heating members which extend  
transversely to the flow of plastics waste and which are arranged to  
create a non-uniform thermal surface in the region of an inlet of the  
melt chamber.

WO 2005/080060 A1



**Published:**

— with international search report

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*